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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/680,057 | 10/06/2003 | Shia Chung Chen | 13971 B | 6757 |
| 36672 | 7590 | 10/21/2004 | EXAMINER | |
| CHARLES E. BAXLEY, ESQ. 90 JOHN STREET THIRD FLOOR NEW YORK, NY 10038 | | | VAN, QUANG T | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3742 | |

DATE MAILED: 10/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/680,057

Applicant(s)

CHEN, SHIA CHUNG

Examiner

Quang T Van

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6 and 7 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 4/01/2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Drawings

1. Figure 9 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claims 4 and 7 are objected to because of the following informalities: " **could be...**" recited in claim 4, line 3 and in claim 7, line 2 are not positive recitations. Correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. Claims 1-3 are rejected under 35 U.S.C. 102(a) as being anticipated by LeMieux et al (US 6,555,801). LeMieux discloses an induction heating coil using an inductive heating coil (209, 209a) for induct electromagnetic wave, said inductive heating coil

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(209, 209a) is formed by a plurality of coil parts which are structured in such a way that each coil part is on a different plane, in order to avoid any two said neighboring coil parts to repel or counteract each other, so as to advance high cycle magnetic field distributed more evenly (figure 3).

5. Claims 1-3 are rejected under 35 U.S.C. 102(a) as being anticipated by Pisarey (US 2,182,820). Pisarey discloses an induction heating coil using an inductive heating coil (3) for induct electromagnetic wave, said inductive heating coil (3) is formed by a plurality of coil parts which are structured in such a way that each coil part is on a different plane, in order to avoid any two said neighboring coil parts to repel or counteract each other, so as to advance high cycle magnetic field distributed more evenly (figure 4).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 4 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over LeMieux et al (US 6,555,801) in view of Herbenar (US 2,604,419). LeMieux discloses substantially all features of the claimed invention except said inductive heating coil is moved independently and disposed near the peripheral edge of said object for heating, or inserted inside at a proper place of said object for heating. Herbenar discloses and induction heating coil (13, 15) moved independently and disposed near the peripheral

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edge of said object for heating (col. 4, lines 42-45), or inserted inside at a proper place of said object for heating (col. 4, lines 42-45). It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize in LeMieux an inductive heating coil is moved independently and disposed near the peripheral edge of said object for heating, or inserted inside at a proper place of said object for heating as taught by Herbenar in order to heat treat either the inner wall or the outer wall of the heated object.

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over LeMieux et al (US 6,555,801) in view of Herbenar (US 2,604,419) and further in view of Ogasawara et al (US 2004/0004071). LeMieux / Herbenar disclose substantially all features of the claimed invention except its peripheral coil part being coated with an insulated layer. Ogasawara discloses an induction coil part (WP) being coated with an insulated layer (page 5, par. 0089). It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize in LeMieux / Herbenar an induction coil part being coated with an insulated layer as taught by Ogasawara in order to avoid electromagnetic wave of said inductive heating coil in contact with said object to induct electricity improperly.

9. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record does not show or suggest said inductive heating coil is


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moved independently for heating, one end is fixed and held by a mechanism arm for moving and disposed at a proper place, said coil parts having a plurality of ceramic rings for insulation as recited in claim 5.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quang T Van whose telephone number is 703-306-9162. The examiner can normally be reached on 8:00Am 7:00Pm M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on 703-305-5766. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


QV
October 15, 2004


Quang T Van
Primary Examiner
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